



February 25, 2016

**CERTIFIED MAIL 7011 2970 0000 3523 1768**

Office of Enforcement and Compliance Assurance  
Office of Federal Activities  
International Compliance Assurance Division (2254A)  
Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

Re: 2015 Calendar Year (CY 2015) Annual Hazardous Waste Export Report  
Valero Refining - Texas L.P. (Houston Refinery)  
Industrial Solid Waste Registration No. 30520  
EPA ID No. TXD053624193  
Regulated No. RN 100219310  
Customer No. CN 600127468

Dear Administrator,

Valero's Houston Refinery is submitting the Annual Hazardous Waste Export Report, required by 40 CFR Part 262, Subpart E. Section 262.58 sets forth the requirements of international agreements between the United States and receiving countries which establish different notice, export, and enforcement procedures for the transportation, treatment, storage and disposal of hazardous waste for shipments between the United States and those countries. A primary exporter of hazardous waste must comply with the special requirements of this subpart. A transporter transporting hazardous waste for export must comply with applicable requirements of part 263. This report has been prepared for CY 2015 hazardous waste exports in accordance with the requirements of 40 CFR 262.56:

(a)(1) The EPA identification number, name, and mailing and site address of the exporter:

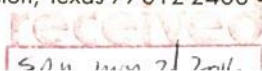
TXD053624193, Valero Refining – Texas L.P. (Houston), 9701 Manchester Ave., Houston, TX 77012;

(a)(2) The calendar year covered by the report:

CY 2015 export information is updated with this report;

(a)(3) The name and site address of each consignee:

EG Metal Corporation, #687, Cheoyong-Ro, Nam-Gu, Ulsan, Korea;



(a)(4) By consignee, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from 40 CFR part 261, subpart C or D), DOT hazard class, the name and US EPA ID number (where applicable) for each transporter used, the total amount of waste shipped and number of shipments pursuant to each notification:

For reclamation to EG Metal Corporation, Korea, Hydrotreating Catalyst, K171, D018, D003 DOT Hazard Class 4, Best Transportation (EPA ID TXR000068676); 240 tons, 13 shipments were made in CY 2015;

(a)(5) Except for hazardous waste produced by exporters of greater than 100 kg but less than 1000 kg in a calendar month, unless provided pursuant to §262.41, in even numbered years:

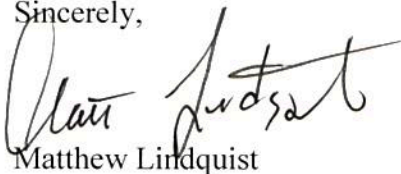
(i) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;

Valero maintains a Source Reduction Waste Minimization Plan for the Houston Refinery. The attached annual progress report is submitted to the Texas Commission on Environmental Quality;

(a)(6) A certification signed by the primary exporter: see Attachment II

Should you have any questions or require additional information, please contact Chris Hendrix at (713) 923-3359 or via e-mail at [chris.hendrix@valero.com](mailto:chris.hendrix@valero.com).

Sincerely,



Matthew Lindquist  
Manager Environmental Engineering

Attachments

cc: TCEQ Region 12

**CERTIFIED MAIL 7011 2970 0000 3523 1317**

# **Pollution Prevention Plan**

**[Reduction of Hazardous Waste TRI Chemical Releases]**

**Plan Year: 2015**

**Valero Refining – Texas, L.P.**  
[Houston Refinery]

9701 Manchester  
Houston, TX 77012

## **ATTACHMENT I**

VALERO REFINING - TEXAS L.P. (Houston Refinery)  
SOURCE REDUCTION WASTE MINIMIZATION PLAN  
EXECUTIVE SUMMARY / ANNUAL PROGRESS REPORT



## EXECUTIVE SUMMARY

Pollution Prevention (P2) Plan developed for Reduction of Hazardous Wastes and TRI Compound Releases at the Valero Refining - Texas, L.P. (Houston Refinery).

### DESCRIPTION OF FACILITY

**Address:**

Valero Refining - Texas, L.P.  
Houston Refinery  
9701 Manchester  
Houston, TX 77012

**Local Contact:** Matthew Lindquist; Manager, Environmental Engineering

**Technical Contact:** Mr. Chris Hendrix; Environmental Engineer

**Facility:** Valero Refining - Texas, L.P. operates a petroleum refinery in Houston, Texas that processes crude oil and residual oil into petroleum products. Unit operations include crude oil distillation, catalytic cracking, alkylation, sulfur recovery, residual oil solvent extraction (ROSE), ultra low sulfur diesel (ULSD) and hydrotreating.

REGISTRATION / PERMIT	NUMBER
TCEQ Account No.:	HG-0130-C
TCEQ Solid Waste Notice of Registration	30520
TCEQ Wastewater Discharge Permit:	00535
EPA Hazardous Waste Generator No.	TXD053624193
TPDES Wastewater Discharge permit:	TX0002976
UIC Registration	Not applicable

### POLLUTANTS GENERATED

An inventory list of the largest generated volume of solid and hazardous waste materials during 2013 is contained in Table 1. Table 3 presents the reportable 2013 Toxic Release Inventory (TRI) releases.

### POLLUTION REDUCTION PRIORITY

The Houston Refinery has set the following priority on source equipment, streams and pollutants to be controlled or minimized to help reduce overall risk to human health and the environment:

- Process Wastewaters Contaminates
- Wastewater Treatment System  
[API sludge, DAF Unit float, Bio-sludge]
- Flaring Event Emissions  
[Maintenance, Start-up, Shut-down and Upset]
- Storage tank cleaning sludge - bottoms
- Other Solid Wastes  
[Catalysts, CIWA Solids]
- Fugitive emissions / other TRI releases

## PROGRAM COMMITMENT AND GOALS

Valero has dedicated equipment, people, policies and procedures to minimize the environmental impact of its operations and improve surrounding communities. From state-of-the-art scrubbers to infrared imaging technology to flare-gas recovery systems, Valero works to apply the best available technology to reduce emissions, minimize hazardous waste generation, and improve efficiency. Our progress is in part measured through the Solomon Survey program which benchmarks refining industry performance in energy, maintenance and reliability. The refinery is committed to top tier Solomon operation to help drive our health, safety and environmental improvements.

Source reduction and waste minimization priorities and goals in the 2015 P2 Plan include:

- Maintaining environmentally compliant, safe, reliable plant operation to minimize risks to human health and the environment,
- Top tier energy, maintenance, reliability programs,
- Reducing uncontrolled total TRI releases,
- Managing environmental impacts by waste treatment, reuse, and recycling,
- Reducing the long-term liability of waste management,
- Minimizing flaring emissions related to planned maintenance or upset conditions,
- Reducing the quantity of hazardous wastes and materials transported over public roadways,
- Reducing overall hazardous waste generation.

## P2 PLAN PROJECTS

The 2015 P2 Plan includes projects and management programs with performance goals that are measurable towards source reduction and waste minimizations priorities. Valero believes that these projects will minimize or reduce solid and hazardous waste generation and TRI releases to the environment:

PROJECT	TYPE	GOAL / DATE
<u>Wastewater Treatment Unit Reliability Project</u> : new clarifier tank; equalization tank conversion to activated sludge; conversion to pipeline O2; DAF unit optimization	Source Reduction by Technology Upgrade	Process Optimization / Reliability improvements- maintain 99% mechanical availability / treatment [annual, 3 <sup>rd</sup> Qrt 2015]
<u>Flare Gas Recovery Project</u> : equipment provides recovery of potential TRI hydrocarbon emissions from routine, maintenance or upset conditions	Source Reduction by Technology Upgrade	Optimization - recover 90% of available process gas; reducing potential flaring [annual, in operation]
<u>BELCO Scrubber System</u> : designed to reduce sulfur oxide, particulate and nitrogen oxide emissions	Source Reduction by Technology Upgrade	Optimization - efficiency / reliability with 99% mechanical availability [annual, in operation]
<u>DAF Float Recycle</u> : process as Coker Quench Cycle feed to reduce / eliminate disposal as hazardous waste	Waste Minimization	Achieve annual recycling rate of 95% [annual - in operation]
<u>Processing of API Sludge</u> : dewatering to reduce disposal volume	Waste Minimization	Recycle 50% of available generated waste volume [annual, 2 <sup>nd</sup> Qrt, 2015]
<u>Tank Cleaning Bottoms</u> : evaluate dewatering waste minimization systems each project	Waste Minimization	Recycle 50% of available generated waste volume [annual 2 <sup>nd</sup> Qrt, 2015]



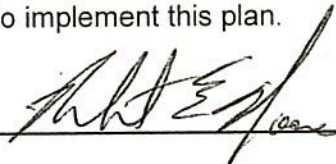
<u>Processing Bundle Cleaning Sludge:</u> evaluate dewatering / new minimization technologies	Waste Minimization	Recycle 50% of available generated waste volume [annual, 2015]
<u>Waste Media Beneficial Recycle / Re- use:</u> solid non-hazardous spent hopper catalyst, sandblast grit, CIWA clarifier media	Waste Minimization	Recycle - reuse 95% of available generated waste volume [annual, 2015]
<u>Improved Waste Management Practices:</u> reduction of volume non hazardous plant trash; Installation of a trash compactor	Waste Minimization	Reduce volume - minimize landfill disposal space [2 <sup>nd</sup> Qrt, 2015]
<u>Cooling Tower Emissions Monitoring System:</u> provide early equipment leak detection and emissions measurement.	Source Reduction by Technology Upgrade	Reduce source emission event duration / amount by 50% [annual, in operation]
<u>Expanded single source stream recycling program:</u> recycle program for cardboard, plastic, glass	Source Reduction by Technology Upgrade	Recycle 50% of available generated waste volume [annual, in operation]
<u>Infrared Emissions Leak Detection Camera (FLIR):</u> new technology to help identify leaking equipment	Source Reduction by Technology Upgrade	Reduce source emission duration / amount by 50% [annual, in operation]
<u>Boiler / Heater Optimization Tuning Project:</u> reduce energy loss and help minimize CO / NOx emissions	Source Reduction by Technology Upgrade	Optimization - efficiency / reliability process [monthly, in operation]
<u>Management Leadership Team:</u> weekly team meetings covering health, safety and environmental issues / performance	Source Reduction	Environmental compliance and performance review [weekly, in operation]
<u>Chemical Approval Process:</u> ensure effective management of change (MOC)	Source Reduction by Technology Upgrade	Review of chemical impact to waste Routine [2015]
<u>Water: reuse / minimization project</u>	Source Reduction by Technology Upgrade	Define water use, waste water recycle priorities [2 <sup>nd</sup> Qrt, 2016]
<u>Electrical System Infrastructure Reliability / Optimization Projects</u>	Technology Upgrade	Optimization / Improvement to electrical supply distribution infrastructure [2015];

## **2015 POLLUTION PREVENTION PLAN CERTIFICATION**

I certify that this Pollution Prevention Plan has been completed to meet the specific requirements of Senate Bill 1099 of the 72nd Texas Legislature, the Solid Waste Disposal Act, and 30 TAC Sections 335.471 - 335.480, and that the information provided herein is correct and complete.

This document also certifies that I have the authority to commit the corporate resources necessary to implement this plan.

Name:



Date

12/15/14

Robert E. Moore  
Vice President and General Manager  
Valero Houston Refinery

**ATTACHMENT II**

**PRIMARY EXPORTER CERTIFICATION**

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# ACKNOWLEDGMENT OF CONSENT

June 16, 2014

COMPANY

QUANTITY

**OMNI VISION INTERNATIONAL, INC.  
LOS ANGELES, CA**

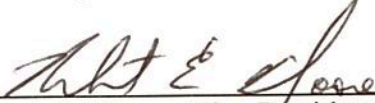
**15000 US Tons**

This document will serve as the EPA Acknowledgment of Consent for **OMNI VISION INTERNATIONAL, INC., LOS ANGELES, CA** to export **15000 US Tons** of **SPENT REFINERY CATALYSTS INCLUDING Mo, V2O5, Ni, Co, W, LOI, CARBON** (EPA hazardous waste numbers **K171, K172**) to foreign importer: **EG METAL CORPORATION, 687, CHEOYONG-RO, NAMGU, ULSAN, KOREA** to receiving facility: **EG METAL CORPORATION, 687, CHEOYONG-RO, NAMGU, ULSAN, KOREA**. This **CONSENT** is **VALID** for the period of **May 30, 2014 through May 29, 2015**.

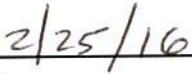
Please be advised that a copy of this **CONSENT** must accompany each shipment of hazardous waste and that a copy of the manifest must be left with the U.S. Customs Service when the material leaves the jurisdiction of the United States.

**CERTIFICATION NOTIFICATION BY PRIMARY EXPORTER**

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.



Robert E. Moore, Vice President and General Manager



Date



**VALERO  
HOUSTON**

9701 Manchester • Houston, Texas 77012-2408

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Assurance  
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